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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,257	01/09/2001	Wofgang Gunther	201013US0PCT	8345

22850 7590 04/16/2003

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MEDLEY, MARGARET B

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/720,257	GUNTHER ET AL.	
	Examiner	Art Unit	
	Margaret B. Medley	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment, Paper No. 11, dated April 08, 2003 has been entered of record. The amendment to claims 3, 10 and 13 has been entered of record and newly added claims 17-18 has been entered of record. The pending claims of record are claims 1-18.

In view of applicants' request for reconsideration and the entry of amended claims 3, 10 and 13 and entry of newly added claims 17-18 the finality of the last office action is withdrawn. An action on the merit is set forth below.

The first and second paragraph rejections over claims 1-2,9; 3,5-9 and 16; 10-11; 13; and 14-15 are withdrawn as not being drawn to new matter issues.

The first paragraph rejection of claims 10-11 and 13 based on the disclosure issue is withdrawn based on applicants arguments set forth on page 7 of Paper No. 11 dated April 8, 2003.

The second paragraph rejection under 35 U.S.C. 112 of claims 10 and 13 is maintained in that claim 13 directed to a concentrate has not added a solvent or a diluent or any range of proportion to distinguish it from the additive of claim 10. The examiner takes the position on record that claim 13 appears to duplicate claim 10 because it does not further limit the instant claimed invention.

The 102 (b0) rejection based on Polss is withdrawn from the record.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Thomas EP0704519A1, note page 4 lines 19-24 for fuel compositions for Internal Combustion Engines (ICE) comprising a major amount of liquid hydrocarbon fuel and a (i) propoxylate additive of formula I where n is 8-30 and R¹ include iso-tridecanol, page 3 lines 41-46 the additive mixture further include a (ii) polyisobutylamine detergent additive having a MW of 500-1000 page 2, lines 56-58, Example 2 and page 3, line 15, wherein (i) to (ii) is anticipated by the range of 5:95 to 85:15, preferably 20:80 to 80:20, page 4, lines 8-9, the total proportion of (i) plus (ii) is 450-600 mg/kg fuel, note Examples 2, 4, 6 and 7, the use of the additive as a lubricant composition, and as an intake valve cleaner additive for fuel composition in ICE is known, page 4, lines 28-30.

Claims 14-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Daly EP 0878532A1.

Daly teaches a fuel composition comprising a major amount of liquid hydrocarbon, page 4 lines 26, comprising a propoxylated additive, page 4, lines 48 to end and page 5 lines 25-29, a detergent, page 6 lines 44-52 and Example 9 of Table 1, and (i) and (ii) present in amount of 100-10,000 mg/kg fuel, page 9, line 27-33, is used to prevent or reduce the formation of intake valve or combustion chamber deposits or to remove their deposits, note page 9 lines 40-42.

Claims 14-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Aiello et al 5,006,130.

Aiello et al teach fuel compositions for ICE, abstract, comprising a major amount of liquid hydrocarbon fuel and a (i) propoxylate additive b(iv) where n is at least 7 and R¹ is an alkyl group up to 20 carbon atoms, note column 5 lines 53-61 and claims 1 and 8-15, in 80-110 ppm of the fuel, column 6, line 45, and (ii) an aliphatic alkylene polyamine additive, column 3 line 63 to column 3, lines 1-2 and d³ in Table I of column 8, wherein (i) and (ii) is added to the fuel between 100 and 10,000 mg/kg fuel, column 6 line 45, the additive is prepared as a concentrate, column 7, line 57, and the additive is known as an intake valve cleaner, abstract and claim 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas EP 0704,519A1.

Thomas is silent to explicit teachings to a specific propoxylate having n = 15 and R¹ is straight-chained or branched C13 alkyl group. It is the examiner's position that the selection of the specific propoxylate is within the propoxylate of Thomas wherein n is 8-30 and R¹ includes iso-tridecanol, page 3 lines 41-46. The propoxylates of Thomas known as carrier oils would also exhibit their intake valve cleaning properties in the fuel composition. In the absence of evidence to the contrary the claim is

deemed prima facie obvious. A review of the data presented in the specification in Table I on pages 14 of the instant application shows that the branched C₁₃-alkyl group having 15 propylene oxide units is a better intake valve deposit reducer (4,0,1,0) than the branched C₁₃-alkyl having 10 or 20 propylene units intake valve deposit reducer (13,2,11,58) and (17, 0, 0, 22), respectively, but not unexpected. Claims 9 and 16 as drafted are not limited to the branched C₁₃ alkyl propylene oxide units (15) and it is not clear from the record that the same results would be results with the use of the linear form of the said compound. It is not clear from the data presented of record that the same results could be yielded with the 14 and 16-18 units of propylene oxides (PO) as with the 15 (PO) units. Thus claims 9 and are prima facie obvious over the teachings of Thomas in the absence of data of record to the contrary.

Claims 1-3, 5-8, 10-15 and 17-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas EPO-704, 519A1.

Thomas EP0704519A1, note page 4 lines 19-24 for fuel compositions for Internal Combustion Engines (ICE) comprising a major amount of liquid hydrocarbon fuel and a (i) propoxylate additive of formula I where n is 8-30 and R¹ include iso-tridecanol, page 3 lines 41-46 the additive mixture further include a (ii) polyisobutylamine detergent additive having a MW of 500-1000 page 2, lines 56-58, Example 2 and page 3, line 15, wherein (i) to (ii) is anticipated by the range of 5:95 to 85:15, preferably 20:80 to 80:20, page 4, lines 8-9, the total proportion of (i) plus (ii) is 450-600 mg/kg fuel, note Examples 2, 4, 6 and 7, the use of the additive as a lubricant composition, and as an intake valve cleaner additive for fuel composition in ICE is known, page 4, lines 28-30.

Thomas is silent to explicit teachings to a specific propoxylate having $n = 15$ and R^1 is straight-chained or branched C_{13} alkyl group. It is the examiner's position that the selection of the specific propoxylate is within the propoxylate of Thomas wherein n is 8-30 and R^1 includes iso-tridecanol, page 3 lines 41-46. The propoxylates of Thomas known as carrier oils would also exhibit their intake valve cleaning properties in the fuel composition. In the absence of evidence to the record to the contrary the claim is deemed *prima facie* obvious. A review of the data presented in the specification in Table I on pages 14 of the instant application shows that the branched C_{13} -alkyl group having 15 propylene oxide units is a better intake valve deposit reducer (4,0,1,0) than the branched C_{13} -alkyl having 10 or 20 propylene units intake valve deposit reducer (13,2,11,58) and (17, 0, 0, 22), respectively, but not unexpected. Claims as drafted are not limited to the branched C_{13} alkyl propylene oxide units (15) and it is not clear from the record that the same results could be produced with the use of the linear form of the said compound. It is not clear from the data presented of record that the same results could be produced with the 14 and 16-18 units of propylene oxides (PO) as with the 15 (PO) units and especially with a linear alkyl group. Thus the instant claims are *prima facie* obvious over the teachings of Thomas in the absence of data of record to the contrary.

Claims 1-3, 5-8, 10-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daly EP 0878532A1 combined with Thomas EPO-704, 519A1.

Daly teaches a fuel composition comprising a major amount of liquid hydrocarbon, page 4 lines 26, comprising a propoxylated additive, page 4, lines 48 to

end and page 5 lines 25-29, a detergent, page 6 lines 44-52 and Example 9 of Table 1, and (i) and (ii) present in amount of 100-10,000 mg/kg fuel, page 9, line 27-33, is used to prevent or reduce the formation of intake valve or combustion chamber deposits or to remove their deposits, note page 9 lines 40-42. Daly is silent to explicit teachings to the instant claimed alkyl group having 14-18 propylene oxides (PO) units.

Thomas EP0704519A1, note page 4 lines 19-24 for fuel compositions for Internal Combustion Engines (ICE) comprising a major amount of liquid hydrocarbon fuel and a (i) propoxylate additive of formula I where n is 8-30 and R¹ include iso-tridecanol, page 3 lines 41-46 the additive mixture further include a (ii) polyisobutylamine detergent additive having a MW of 500-1000 page 2, lines 56-58, Example 2 and page 3, line 15, wherein (i) to (ii) is anticipated by the range of 5:95 to 85:15, preferably 20:80 to 80:20, page 4, lines 8-9, the total proportion of (i) plus (ii) is 450-600 mg/kg fuel, note Examples 2, 4, 6 and 7, the use of the additive as a lubricant composition, and as an intake valve cleaner additive for fuel composition in ICE is known, page 4, lines 28-30.

Thomas is silent to explicit teachings to a specific propoxylate having n = 15 and R¹ is straight-chained or branched C₁₃ alkyl group. It is the examiner's position that the selection of the specific propoxylate is within the propoxylate of Thomas wherein n is 8-30 and R¹ includes iso-tridecanol, page 3 lines 41-46. The propoxylates of Thomas known as carrier oils would also exhibit their intake valve cleaning properties in the fuel composition. In the absence of evidence to the record to the contrary the claim is deemed prima facie obvious. A review of the data presented in the specification in Table I on pages 14 of the instant application shows that the branched C₁₃-alkyl group

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having 15 propylene oxide units is a better intake valve deposit reducer (4,0,1,0) than the branched C₁₃- alkyl having 10 or 20 propylene units intake valve deposit reducer (13,2,11,58) and (17, 0, 0, 22), respectively, but not unexpected. Claims as drafted are not limited to the branched C₁₃ alkyl propylene oxide units (15) and it is not clear from the record that the same results could be produced with the use of the Linear form of the said compound. It is not clear from the data presented of record that the same results could be produced with the 14 and 16-18 units of propylene oxides (PO) as with the 15 (PO) units and especially with a linear alkyl group. Thus the instant claims are prima facie obvious over the teachings of Thomas in the absence of data of record to the contrary. Thus it would be obvious to the artisan in the art with the teaching of Thomas to select iso-tridecanol as the alkyl group for the (PO) units as the compound of Daley to render the instant claims obvious.

Claims 1-3, 5-6, 10, 13-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aiello et al (Aiello) 5,006,130 in view of Thomas EPO-704, 519A1.

Aiello et al teach fuel compositions for ICE, abstract, comprising a major amount of liquid hydrocarbon fuel and a (i) propoxylate additive b (iv) where n is at least 7 and R¹ is an alkyl group up to 20 carbon atoms, note column 5 lines 53-61 and claims 1 and 8-15, in 80-110 ppm of the fuel, column 6, line 45, and (ii) an aliphatic alkylene polyamine additive, column 3 line 63 to column 3, lines 1-2 and d³ in Table I of column 8, wherein (i) and (ii) is added to the fuel between 100 and 10,000 mg/kg fuel, column 6 line 45, the additive is prepared as a concentrate, column 7, line 57, and the additive is

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known as an intake valve cleaner, abstract and claim 1. Aiello is silent to explicit teaching to 14-18 units of propylene oxide.

Thomas EP0-704,519A1, note page 4 lines 19-24 for fuel compositions for Internal Combustion Engines (ICE) comprising a major amount of liquid hydrocarbon fuel and a (i) propoxylate additive of formula I where n is 8-30 and R¹ include iso-tridecanol, page 3 lines 41-46 the additive mixture further include a (ii) polyisobutylamine detergent additive having a MW of 500-1000 page 2, lines 56-58, Example 2 and page 3, line 15, wherein (i) to (ii) is anticipated by the range of 5:95 to 85:15, preferably 20:80 to 80:20, page 4, lines 8-9, the total proportion of (i) plus (ii) is 450-600 mg/kg fuel, note Examples 2, 4, 6 and 7, the use of the additive as a lubricant composition, and as an intake valve cleaner additive for fuel composition in ICE is known, page 4, lines 28-30.

Thomas is silent to explicit teachings to a specific propoxylate having n = 15 and R¹ is straight-chained or branched C₁₃ alkyl group. It is the examiner's position that the selection of the specific propoxylate is within the propoxylate of Thomas wherein n is 8-30 and R¹ includes iso-tridecanol, page 3 lines 41-46. The propoxylates of Thomas known as carrier oils would also exhibit their intake valve cleaning properties in the fuel composition. In the absence of evidence to the record to the contrary the claim is deemed prima facie obvious. A review of the data presented in the specification in Table I on pages 14 of the instant application shows that the branched C₁₃-alkyl group having 15 propylene oxide units is a better intake valve deposit reducer (4,0,1,0) than the branched C₁₃- alkyl having 10 or 20 propylene units intake valve deposit reducer

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(13,2,11,58) and (17, 0, 0, 22), respectively, but not unexpected. Claims as drafted are not limited to the branched C₁₃ alkyl propylene oxide units (15) and it is not clear from the record that the same results could be produced with the use of the linear form of the said compound. It is not clear from the data presented of record that the same results could be produced with the 14 and 16-18 units of propylene oxides (PO) as with the 15 (PO) units and especially with a linear alkyl group. Thus the instant claims are prima facie obvious over the teachings of Thomas in the absence of data of record to the contrary. Thus it would be obvious to the artisan in the art with the teaching of Thomas to select iso-tridecanol as the alkyl group for the (PO) units as the compound of Aiello to render the instant claims obvious.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polss 3,901,665. in view of Thomas EPO-704,519A1.

Polss teaches a fuel composition for ICE, claim 1 and column 4 lines 32-34 comprising a major amount of liquid hydrocarbon fuel and 0.004-0.006 parts by weight of a propoxylate wherein $n = 4-20$ and R^1 is 10-20, note column 2, lines 39-60 and claim 1, and the inclusion of a detergent additive, note polymer A column 2, the additive prepared as a concentrate, column 3, line 51, and the additives are used as a known valve cleaner additive, column 1, lines 57-61. Polss is silent to explicit teaching to 14-18 units of (PPO) units.

Thomas EP0-704,519A1, note page 4 lines 19-24 for fuel compositions for Internal Combustion Engines (ICE) comprising a major amount of liquid hydrocarbon fuel and a (i) propoxylate additive of formula I where n is 8-30 and R^1 include iso-

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tridecanol, page 3 lines 41-46 the additive mixture further include a (ii) polyisobutylamine detergent additive having a MW of 500-1000 page 2, lines 56-58, Example 2 and page 3, line 15, wherein (i) to (ii) is anticipated by the range of 5:95 to 85:15, preferably 20:80 to 80:20, page 4, lines 8-9, the total proportion of (i) plus (ii) is 450-600 mg/kg fuel, note Examples 2, 4, 6 and 7, the use of the additive as a lubricant composition, and as an intake valve cleaner additive for fuel composition in ICE is known, page 4, lines 28-30.

Thomas is silent to explicit teachings to a specific propoxylate having $n = 15$ and R^1 is straight-chained or branched C_{13} alkyl group. It is the examiner's position that the selection of the specific propoxylate is within the propoxylate of Thomas wherein n is 8-30 and R^1 includes iso-tridecanol, page 3 lines 41-46. The propoxylates of Thomas known as carrier oils would also exhibit their intake valve cleaning properties in the fuel composition. In the absence of evidence to the record to the contrary the claim is deemed prima facie obvious. A review of the data presented in the specification in Table I on pages 14 of the instant application shows that the branched C_{13} -alkyl group having 15 propylene oxide units is a better intake valve deposit reducer (4,0,1,0) than the branched C_{13} -alkyl having 10 or 20 propylene units intake valve deposit reducer (13,2,11,58) and (17, 0, 0, 22), respectively, but not unexpected. Claims as drafted are not limited to the branched C_{13} alkyl propylene oxide units (15) and it is not clear from the record that the same results could be produced with the use of the linear form of the said compound. It is not clear from the data presented of record that the same results could be produced with the 14 and 16-18 units of propylene oxides

(PO) as with the 15 (PO) units and especially with a linear alkyl group. Thus the instant claims are prima facie obvious over the teachings of Thomas in the absence of data of record to the contrary. Thus it would be obvious to the artisan in the art with the teaching of Thomas to select iso-tridecanol as the alkyl group for the (PO) units as the compound of Polss to render the instant claims obvious.

Applicant's arguments with respect to claims 1-3 and 5-18 have been considered but are moot in view of the new ground(s) of rejection.

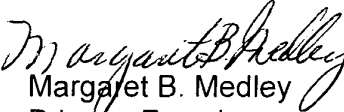
The prior art cited but not relied upon further teaches fuel compositions comprising propoxylated additives and detergents of the same nature as claimed by applicants.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret B. Medley whose telephone number is 703-308-2518. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Margaret B. Medley
Primary Examiner
Art Unit 1714

MBMedley
April 15, 2003